

1 AS A BELOW-NAMED INVENTOR, I hereby declare:

2 That pursuant to 37 CFR §1.68, I have been warned that willful false
3 statements and the like are punishable by fine or imprisonment or both [18
4 USCA §1001] and may jeopardize the validity of the application or any patent
5 issued thereon;

6 That I further confirm that all statements made on my own knowledge are
7 true and that all statements made on information and belief are believed to be
8 true;

9 That I, William M. Owens, make this Declaration in accordance with 37
10 CFR §1.63 in support of my application for an utility patent upon my Feedworks
11 Device and in Reply to that certain Office Action dated 03/28/00;

12 That submitted herewith is a Reply to Office Action which contains
13 amendments to the Specification, Drawing and Claims and a new Claim 14
14 submitted to overcome the 35 U.S.C. 103(a) Rejections and I certify that
15 neither the amendments nor the new Claim contain new matter (37 C.F.R.
16 1.125;

17 That I request that objections or requirements as to form not necessary
18 to the consideration of the Claims be held in abeyance until allowable subject
19 matter is indicated, 37 C.F.R. 1.111(b);

20 That I have been in the lumber industry for 32 years and have been
21 inventing, designing and making machines for the lumber industry since 1968;

22 That I received U. S. Patent Number 5,501,752 in March, 1996 on my
23 "Wooden I - Beam Assembly Machine";

24 That the machines available to the industry were overly complicated and,
25 except for the very expensive machines, i.e. hundreds of thousands of dollars,
26 could not do the job of cutting/shaping wood boards at a constant rate without
27 marring the wood surface or having wood wobble horizontally during the
28 cutting/shaping operation;

1 That I reviewed all of the Patents contained in my disclosure statement
2 and all the Patents provided by Examiner Goodman, which go back to the
3 1940s and none of them have solved the problem of creating a mechanically
4 simple apparatus by placing known elements into a new combination unknown
5 to the lumber industry;

6 As is shown by the myriad of Patents issued by the U. S. Patent Office,
7 many, many inventors have tried to solve this problem to keep the rate of
8 movement of wood boards through one or more cutters/shapers constant and
9 maintaining alignment of the boards without side clamping;

10 That my claim for Patent is an improvement Claim over the existing art;

11 That if my improvements are anticipated or obvious, someone else would
12 have been able to put this combination together since the 1940s;

13 That my invention is a commercial success and even though I make them
14 myself, one at a time, I have sold the following:

15	Dec 1997	P. J. Lumber Co.	\$38,000
16	Jan 1999	P. J. Lumber Co.	\$46,800
17	Dec 1999	Sauder Wood Products	\$70,000
18	Sales Pending to Butteville Lumber Co., Northwest Forest Fibre 19 Products, and Cascade Hardwoods;		

20 That it takes over 6 months for me to manufacture one of these
21 machines;

22 That I have numerous inquiries and others out on quote;

23 That U. S Patent 5,456, 148 issued to Jack L. Hoffa on 10 October,
24 1995, cited by Examiner Goodman as anticipating my invention (35 U.S.C.
25 102(b)) is classified by the Patent Office under Class 83 subclass 155, which
26 is not searched for wood cutting Patents, see Cannaday U. S. Patent No.
27 5,396,938 and all other wood cutting U. S. Patents cited by the Examiner;

28 That U. S. Patent 5,456,148 is for a wire or cable machine to cut lengths
or strip sheathing off of wire, and does not teach cutting the product

1 longitudinally only horizontally, nor does it teach how to sculpt or shape it by
2 cutting away material;

3 That no one in the wood cutting machine industry would reasonably be
4 expected or motivated to look to wire cutting machinery for a solution to the
5 problems solved by my invention;

6 That wire, i. e. metal, acts differently than wood;

7 That the field of U. S. Patent 5,456,148 is not reasonably pertinent to the
8 field of wood cutting and shaping;

9 That U. S. Patent 5,456,148 does not teach every aspect of my claimed
10 invention explicitly and there is no extrinsic evidence cited by the Examiner that
11 persons reasonably skilled in the art of wood cutting machine design would
12 know of the missing portions, so that they can not be implied;

13 That the following differences are noted between U. S. Patent 5,456,148
14 and my claimed invention:

15 a. It uses timing belts and timing sprockets (pulleys). They are
16 not of laminated 'V' belt and flat belt construction. Its 'Vees' are gear-belt-cogs
17 meant to transmit rotary power at an exact rate. Its 'Vees' are at 90 degrees
18 to my claimed invention 'V' guides;

19 b. Its belts' flanged side-guide between the outer flanged
20 positions in sprockets are wider than the belt width, allowing for some side
21 motion which is not suitable for my purposes. A key element of my claimed
22 invention is that the wood tracks smoothly through the cutter/shaper without
23 any side movement or wobble;

24 c. It uses a means to transmit power to the top and bottom of
25 the round wire piece, for its purposes. Our material to be cut/shaped is flat,
26 however it is not uniformly flat or level. If we used power on both surfaces, the
27 material might skew and not cut straight. My claimed invention uses a series
28 of independent, non-powered, top hold down rollers for this reason;

1 d. It does not have a continuous feed bed in the area of its
2 rollers. Rather it has a system of three timing belt sprockets, providing a three
3 point contact with the product. It has a continuous support in its wire cutting
4 and stripping area only, while in my claimed invention the product is not
5 supported allowing for our tooling configuration, although a support is
6 envisioned to go around the tooling for bottom bed support;

7 e. It provides that each set of sprockets and belts adjust, or float
8 up/down from a common centerline (see Fig 7), while my claimed invention has
9 a fixed bottom feed elevation which allows for an in-feed and out-feed product
10 transport system with a fixed transport height;

11 That the references cited by Examiner Goodman in support of his rejection
12 under 35 U. S. C. 103(a) and others cited in connection with the claim of
13 obviousness do not present sufficient elements of my claimed invention to make
14 is obvious to someone skilled in the art of making wood cutting machines and
15 none suggest modifications or combinations to reasonable expect success in
16 making my invention;

17 That the key to my invention is its mechanical simplicity and relatively low
18 cost to manufacture and operate. the following point out some limitations of
19 the references cited by the Examiner:

20 a. Zimmerman, U. S. Patent No. 4,009,741, is a standard
21 bottom roller feed machine with shaper tools adjacent to the splitter saw blade
22 and not applicable to the problems my claimed invention solves;

23 b. Chambers, U. S. Patent No. 5,637,068, claims "quick
24 changing" of cutter tools and makes no mention of a non-skid belt nor a
25 laminated 'V' belt;

26 c. Baranski, U. S. Patent No. 4,681,005, unlike my claimed
27 invention to process wide "flat" pieces that are greater in width than height, is
28 a re-saw machine commonly used to split boards that are greater in height than

1 width, thus requiring a vertical means of holding and feeding a piece accurately
2 through the cutting means. This machine is not practical for wide pieces and
3 is far more complicated than my claimed invention, requiring numerous types
4 of powered transport means with commensurate complication in speed
5 matching of these drives, in order to transport the piece in a true straight line;

6 d. Dunham, U. S. Patent No. 5,105,698, discloses a means of
7 clearing a piece from the cutter tool, but has no functional requirement to hold
8 or guide the piece for cutting in a true straight line;

9 e. Mowery, U. S. Patent No. 2,999,518, does not apply as
10 Owens makes no claims to a means to set or position cutters or fences;


11 f. Pierce, U. S. Patent 2,664,927, claims refer to belts
12 throughout, but they are actually chains and do not perform the functions of my
13 'V' guide belts;

14 That submitted herewith is an additional more restrictive claim submitted
15 to overcome the 35 U.S.C. 103(a) rejections, if the amended original Claims
16 rejected;

17 That attached hereto is a copy of the Report of Comparison of my
18 invention to the more complex and expensive Mereen-Johnson Dip Chain Slat-
19 bed edger conducted by Rich Wagner, an engineer with the R & D department
20 of the Weyerhaeuser Company in which he found that my invention produced
21 comparable cut consistency but was twice as fast and cost less than 1/2 the
22 Mereen-Johnson apparatus;

23 I declare under penalty of perjury under the laws of the State of
24 Washington and the United States the foregoing to be true.

25 Executed this 26th day of June, 2,000 at Tacoma, Washington.

26
27 
28 WILLIAM M. OWENS

Slat width measurements to determine feed and sawing accuracy.

Measured 1 ft from each end & equal spaced 2 additional points. See lab notes for more info.

Board #	point 1	chng. 1 to 2	point 2	chng. 2 to 3	point 3	chng. 3 to 4	point 4	max-min
1-320	4.991		4.986		4.996		4.990	0.010
		-0.005		0.010		-0.006		
2-320	3.315		3.317		3.295		3.249	0.068
		0.002		-0.022		-0.046		
3-320	2.933		2.929		2.935		2.989	0.060
		-0.004		0.006		0.054		
4-320	4.991		5.000		4.997		4.993	0.009
		0.009		-0.003		-0.004		
5-320	4.890		4.907		4.911		4.876	0.035
		0.017		0.004		-0.035		
6-320	4.838		4.851		4.866		4.846	0.028
		0.013		0.015		-0.020		
7-320	2.600		2.588		2.546		2.551	0.054
		-0.012		-0.042		0.005		
8-320	2.960		2.989		2.986		3.033	0.073
		0.029		-0.003		0.047		
9-320	3.043		3.020		3.006		3.053	0.047
		-0.023		-0.014		0.047		
10-320	3.043		3.035		2.998		3.004	0.045
		-0.008		-0.037		0.006		
Averages		0.002		-0.009		0.005		0.047
Max-Min		0.052		0.057		0.100		0.064
1-160	5.670		5.670		5.640		5.633	0.037
		0.000		0.030		0.007		
2-160	4.688		4.708		4.689		4.699	0.020
		0.020		-0.019		0.010		
3-160	5.644		5.658		5.666		5.663	0.022
		0.014		0.008		-0.003		
4-160	5.660		5.696		5.666		5.663	0.036
		0.036		-0.030		-0.003		
5-160	3.920		3.948		3.941		3.925	0.028
		0.028		-0.007		-0.016		
6-160	3.090		3.131		3.136		3.127	0.046
		0.041		0.005		-0.009		
7-160	3.422		3.433		3.429		3.396	0.037
		0.011		-0.004		-0.033		
8-160	2.970		3.016		3.010		3.002	0.046
		0.046		-0.006		-0.008		
9-160	3.770		3.770		3.768		3.772	0.004
		0.000		-0.002		0.004		
10-160	2.801		2.811		2.816		2.802	0.015
		0.010		0.005		-0.014		
Averages		0.021		-0.002		-0.007		0.028
Max-Min		0.046		0.038		0.043		0.042